

# FOAM-LOK™ RF

Open Cell Retrofit Foam  
ICC ESR-2847

# FOAM-LOK™

RETROFIT FOAM INSULATION

## Product Design

**FOAM-LOK™ Retrofit Foam** is specifically designed for injection and pour applications into existing wall cavities and block wall constructions. The **FOAM-LOK™ Retrofit Foam** provides the same physical properties characteristics of the **FOAM-LOK™ Open Cell** spray applied insulation system and allows the applicator to insulate and air seal existing walls without removing the interior face of the existing wall. **FOAM-LOK™ Retrofit Foam** may also be used to insulate the cavities of existing block wall constructions.

## Product Use

**FOAM-LOK™ Retrofit Foam** helps create an air barrier system in wall cavities and may be used to incrementally fill an existing cavity wall or block wall assembly from the bottom to the top in a progressive application. This installation method allows an existing cavity wall to be insulated without the removal of the interior face of the wall, providing an air barrier and insulation of the wall with minimal impact to the wall cavity reducing the time, labor and the expense of removing and replacing the existing interior face of the wall.

In block wall assemblies the **FOAM-LOK™ Retrofit Foam** may be used to incrementally fill the interior cavities of the block to supply insulation and minimize the air leakage and heat transfer of the assembly.

## Recommended Product Applications

- Cavity Wall
- Block Fill

## Recommended Processing Parameters

| Processing Designation | Regular  |
|------------------------|----------|
| Ambient Temperature    | 50-120°F |

Optimum hose pressure and temperature may vary as a function of the type of equipment, ambient and substrate conditions, and the specific application. It is the responsibility of the applicator to properly interpret equipment technical literature, particularly information that relates to acceptable combinations of gun chamber size, proportioner output, and material pressures.

| Processing Designation     | FOAM-LOK™ Retrofit Foam    |
|----------------------------|----------------------------|
| Equipment Dynamic Pressure | 1,000 - 1,200 psi          |
| Preheat Temperature        | 95 – 100 °F<br>(35 – 37°C) |
| Hose Heat Temperature      | 95 – 100 °F<br>(35 – 37°C) |
| Drum Temperature Storage   | 65 - 85 °F<br>(18 - 29 °C) |

**Material shelf life: 3 months when stored within recommended temperature range.**

- 2:1 transfer pumps are recommended for material transfer from container to the proportioner.
- CAUTION: Extreme care must be taken when removing and reinstalling drum transfer pumps so as NOT to reverse the "A" and "B" components.
- Do not circulate or mix other suppliers' "A" or "B" component into **FOAM-LOK™ Retrofit Foam** containers.
- The plural component proportioner must be capable of supplying each component within ± 2% of the desired 1:1 mixing ratio by volume.

## Physical Properties

| Properties                                      | Test Method/ Requirements              | Value  |
|---|--|--|
| Aged "R" Value                                  | ASTM C518                              | 3.9 per inch   |
| Core Density                                    | ASTM D1622                             | .4-.6 lbs./ft3   |
| Open-Cell Content                               | ASTM D2856                             | >94%   |
| Tensile Strength                                | ASTM D1623                             | 3 psi  |
| Air Permeance                                   | ASTM E283-04                           | < 0.02L/s/M <sup>2</sup> at 4.5 inches                 |
| Dimensional Stability: 28 days at 160°F, 100%RH | ASTM D2126<br>15% max by volume change | 3%   |
| Sound Transmission                              | ASTM E413-2004                         | Sound Transmission Class 41                            |
|   | ASTM E1332-90                          | Indoor-Outdoor Transmission Class 30                   |
|   | ASTM C423-02a                          | Noise Reduction Coefficient 0.10                       |
| Moisture Vapor Transmission                     | ASTM E-96                              | 1" - 22 Perms<br>2" - 15 Perms                         |
| Flammability                                    | ASTM E970 / >0.12                      | .19  |
| Flammability                                    | NFPA 259                               | 1812 BTU / ft <sup>2</sup><br>20.6 KJ / m <sup>2</sup> |

## Credentials/Certifications

• ICC ESR-2847

**FOAM-LOK Retrofit Foam** is a **Class I** formulation, as Tested per ASTM E84, and possess the flammability characteristics shown: (UL 723, NFPA 255, UBC 8-1)

|                   |         |
|-------------------|---------|
| ASTM Method E84   | Class I |
| Flame Spread      | ≤25     |
| Smoke Development | ≤450    |

|             |        |
|-------------|--------|
| ASTM E-1354 | PASSED |
|-------------|--------|

|            |  |
|------------|--|
| ASTM E-119 | 1 Hour Load Bearing Wall - Wood or Steel |
|            | 2 Hour Non Load Bearing Wall - Wood      |

## Room Corner Fire Testing\*

| *NFPA 286                                     |                      |
|---|----------------------|
| Location                                      | SPF Thickness *      |
| Wall and Ceilings                             | Up to 12 in (305 mm) |
| *Diversified Modified NFPA 286 Per Appendix X |                      |
| Walls   | Up to 6.25 in        |
| Ceilings                                      | Up to 10.00 in       |

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Rev. Date 10/30/13

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### Thermal Barrier

IRC and IBC codes require that SPF be separated from the interior of a building by an approved fifteen (15) minute thermal barrier, such as 1/2" gypsum wall board or equivalent, installed per manufacturer's instructions and corresponding code requirements. There are exceptions to the thermal barrier requirement: (1) Code authorities may approve coverings based on fire tests specific to the SPF application. For example, covering systems that successfully pass large scale tests may be approved by code authorities in lieu of a thermal barrier; (2) SPF protected by 1" thick masonry does not need a thermal barrier. Certain materials that offer protection from ignition, called "ignition barriers," may not be considered as thermal barrier alternatives unless they comply with NFPA 286 or other similar full scale tests. Applicators should request test data and code body approvals or other written indications of acceptability under the code to be sure that the product selected offers code-compliant protection.

### Handling and Safety

Respiratory protection is **MANDATORY!** Lapolla requires that supplied air and a full face mask be used during the application of any foam system. Contact Lapolla Industries for a copy of the Model Respiratory Protection Program developed by CPI or visit their web site at [www.polyurethane.org](http://www.polyurethane.org). Persons with known respiratory allergies should avoid exposure to the "A" component. The "A" component contains reactive isocyanate groups. The materials must be handled and used with adequate ventilation. The vapors must not exceed the TLV (0.02 parts per million) for isocyanates. Avoid breathing vapors. Wear a NIOSH approved respirator. If inhalation of vapors occur, remove victim from contaminated area and administer oxygen if breathing is difficult. Call a physician immediately. Avoid contact with skin, eyes, and clothing. Open containers carefully, allowing any pressure to be relieved slowly and safely. Wear chemical safety goggles and rubber gloves when handling or working with these materials. In case of eye contact, immediately flush with large amounts of water for at least fifteen minutes. Consult a physician immediately. In case of skin contact, wash area with soap and water. Wash clothes before reuse.

Positive pressure ventilation of the work area is required to minimize the accumulation of vapors in the work area during the application. Improper application techniques of this foam system must be avoided. This includes excessive thickness, off ratio material, and pouring/injecting into rising foam. The potential results of improperly applied materials may include but is not limited to, excessive heat build-up, and may result in a fire or offensive odors which may not dissipate with time and/or poor product performance due to improper density of the applied material. Large masses of pour/injected materials should be avoided. When large masses are generated they should be removed from the area, cut into small pieces and allowed to cool before disposal. Failure to follow this recommendation may result in a fire. It is recommended that a fire extinguisher be located in an easily accessible portion of the work area.

Applicators should ensure the safety of the job site and construction personnel by posting appropriate signs warning that all "hot work" such as welding, soldering, and cutting with torches should take place no less than 35 feet from any exposed foam. If "hot work" must be performed all spray polyurethane foam should be covered with an appropriate fire or welder's blanket, and a fire watch should be provided.

### In Case of Spills or Leaks Steps To Be Taken-

- Utilize appropriate personal protective equipment (PPE).
- Contain and cover spilled material with a loose, absorbent material such as oil-dry, vermiculite, sawdust or Fuller's earth.
- Shovel absorbent waste material into proper waste containers.
- Wash the contaminated areas thoroughly with hot, soapy water.
- Ventilate area to remove vapors.
- Report sizeable spills to proper environmental agencies.

### In Case of Fire

**Extinguishing Media-**Dry chemical extinguishers such as mono ammonium phosphate, potassium sulfate, and potassium chloride. Additionally, carbon dioxide, high expansion (proteinic) chemical foam, or water spray for large fires.

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### DISCLAIMER

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